STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

July 11, 2003

Bruce Morrison
EPA Region VII
901 N. 5th St.
Kansas City, KS 66101

40315315
Superfund

Dear Mr. Morrison:

As you know, the Department of Natural Resources Hazardous Waste, Land Reclamation, and Water Pollution Control Programs have evaluated The Doe Run Company's latest proposal for the Interim Slag Pile Runoff Control Plan received in parts on April 8 and 14, 2003, and presented again on June 11, 2003. We hope that this letter will resolve remaining issues that the agencies are facing with the slag pile. The main difficulty has been providing for near term storm water runoff control and flood protection to protect the surrounding wetland and aquatic communities in a manner that is consistent with long-term closure. The U.S. Fish and Wildlife Service has gathered evidence from biotic sampling that there are impacts from heavy metals to the aquatic and wetland ecosystem that is adjacent to the slag pile. Recent recurring flooding of the Mississippi River and Joachim Creek over the last ten years has further demonstrated a need to prevent contact between the slag pile and jurisdictional waters of the state.

The department may support the proposed alternatives developed as part of long-term closure options for the slag pile, but we continue to believe interim measures are necessary. Doe Run's levee proposal should be evaluated as a long-term solution along with several additional options and variations of options, including but not limited to removal of the pile and stabilizing the pile in place without expanding the existing foot print. In general, the department supports options that will minimize impacts to the existing wetlands, provide storm water control, and flood protection.

The engineering evaluation/cost analysis process that the EPA proposes is already contained within the Administrative Order of Consent (AOC). Fundamentally, the department believes that the evaluation of interim and long-term solutions for the slag pile must follow the process set forth in the AOC. However, if the EPA believes that modifying the AOC to expedite timeframes is necessary, the department will support that effort.

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Implementation of Doe Run's plan to build a levee would certainly meet the objectives of stormwater runoff control and flood protection. This would be a definite improvement over the existing situation. However, the proposed stabilization provides neither a complete nor a permanent solution to the problem of existing and ongoing environmental damage. Such a remedy would require complete exhumation of the slag and restoration of the wetland. We recognize that this remedy, however, has high costs and various practical limitations. Nonetheless, we would like this alternative evaluated in light of potential natural resource damages that result from past disposal of slag in the wetland and permanent loss of that resource if it remains in place.

The elements of a reasonable long-term solution would involve not only site stabilization, but a technical plan for perpetual monitoring and maintenance, information management, and regular review of scientific and technical information. Effective and reliable implementation of an approved long-term stewardship plan must be adequately funded. Without a technical plan and funding to carry it out, any short term remediation plan is just that- short term.

Doe Run must submit the necessary documentation to the U.S. Army Corps of Engineers and the department's Water Pollution Control Program for evaluation of compliance with substantive requirements of the federal Clean Water Act sections 404 and 401 prior to construction of any levee around the slag pile for flood protection and storm water management. In addition to the engineering design, this would include submittal of a detailed wetland mitigation plan, and any other documentation required by the Corps and Water Pollution Control Program to complete evaluation in accordance with the Clean Water Act sections 404 and 401.

The department recommends analysis of changes to Doe Run's proposal that would minimize the footprint of impacts to the wetland including, but not limited to narrower levees, shorter operational life, and analyses necessary to determine the minimum area required for the stormwater retention basin. A 4:1 slope on the creek side of the levee may unnecessarily take up excessive space in the wetland. Levee stability will be impacted by groundwater pressure during flood events. The Corps of Engineers commonly installs relief wells to discharge to the landward side of their levees. We would recommend evaluating any established criteria for other Corps of Engineers levees that may be appropriate for consideration in this design. We suggest considering an operational life of the slag pile of no more than 20 to 25 years for design of Doe Run's alternatives.

We remain concerned that the current proposal does not provide interim runoff control or flood protection. Doe Run's proposed levee alternatives would require several months for evaluation and selection through the Superfund process, a 404 analysis through the Army Corps of Engineers, 401 certification through the department's Water Pollution Control Program, and public comment. If Doe Run's preferred alternative is ultimately selected, and 404 and 401 approval is granted (and that is still a big uncertainty), the alternative would take at least an additional 18 months to design and construct. This would mean that it could be 2-5 years before final controls are implemented. We request that EPA require Doe Run to implement an

alternative interim control plan (described below) that is relatively consistent with their long-term alternatives. The interim runoff control plan would have the following features:

1. A temporary settling pond providing retention of stormwater for treatment, with a small flood protection berm;
2. Perforated pipe or an open trench along the existing toe of the slag pile to collect stormwater and drain it into the retention basin, consistent with Doe Run's proposed alternatives;
3. A line to pump stormwater from the basin to Doe Run's wastewater treatment plant, and possibly vehicle transport of water until piping is installed;
4. A contingency plan for providing flood protection for the slag pile for a 10-year flood event, which could include, but is not limited to, sand bags or geotextile cover on the toe to be erected quickly when flooding is expected.

These measures, except for the flood contingency, would be largely consistent with Doe Run's levee proposal and could be constructed within 120 days, as is required in the AOC, at low cost.

The settling pond should be located near the existing toe of the slope near the point that water seeps from the slag pile. The settling pond could be constructed by a shallow excavation of approximately 1 acre with the borrow material used to berm around the pond.

There have been questions raised whether it is technically practical to implement contingency flood protection, such as sandbags. The difficulty lies in constructing a sandbag levee the height between the base of the slag pile at it's lowest point, 395 feet above sea level, and the 10-year event flood level, 406 feet above sea level. If a 5-foot berm is constructed around the settling pond from the excavated soil from the basin, than the sand bag levee height would be reduced to 6 feet along this berm. Six feet is a technically practical height to construct temporary flood protection.

The agencies should require Doe Run to implement these interim measures to preserve the process outlined in the AOC. While Doe Run is proposing the levee project as an Interim Slag Pile Control Plan, the scope of the project makes it very unlikely that a long-term remedy would be anything other than expansion of the slag pile to the full extent afforded by the levee.

If Doe Run's levee proposal is implemented, the department will require wetland mitigation beyond what is typically expected in normal, 404-driven wetland mitigation projects due to natural resource injury concerns under CERCLA. Because of our status as Natural Resource Damage Trustee, it will be difficult for the department to agree to this long-term measure without the ecological risk and natural resource damage assessments that are required by the AOC. It will likely be necessary to expedite sampling and reporting activities associated with natural resource assessment.

We feel accepting Doe Run's levee proposal as an option for long-term closure, while requiring an interim plan that is consistent with their preferred long-term closure plan will meet the needs of all parties involved, and should resolve the impasse that has stalled this project for the last year. If you would like to discuss this issue further please contact Mr. Bob Hinkson of my staff at 573-751-0634, or me at 573-751-3356.

Sincerely,

MISSOURI DEPARTMENT OF NATURAL RESOURCES

David E. Mosby, RG
Project Management Unit Chief

DEM:ta

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